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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,888	04/10/2001	Jesse Vernon Corbett JR.	RPS920000131US1	8549

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EXAMINER

CUEVAS, PEDRO J

ART UNIT PAPER NUMBER

2834

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,888

Applicant(s)

CORBETT ET AL.

Examiner

Pedro J. Cuevas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 16-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the linear actuator Group I claim set (now 1-15) in Paper No. 6 is acknowledged.
2. Claims 16-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

4. The corrected or substitute drawings were received on June 28, 2001. These drawings are acceptable.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

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The following title is suggested: Threaded Translation DC Linear Actuator Having Torsion Spring Enabled Reverse Motion.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,935,071A to Schneider et al.

Schneider et al. clearly teaches the construction of an ultrasonic biometric imaging and identity verification system comprising:

a direct current (DC) motor (92) having a stator and a rotor, said stator fixed to a reference frame;

a threaded shaft (170) coupled to said rotor and coaxially coupled to a rotational shaft stop, said shaft stop having a first and second shaft stop surface;

a torsion spring (330, 332) disposed perpendicular to said axis of said threaded shaft, said torsion spring comprising a center portion coaxially attached to said threaded shaft and an outer portion attached to said reference frame, storing rotational energy from DC motor when said DC motor rotates said threaded shaft in a first rotary direction, said torsion spring returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized;

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a translation actuator (112) threadedly coupled to said threaded shaft, said actuator rotationally stopped and operable to laterally translate in response to rotation of said threaded shaft by said DC motor and having portion operable to engage a mechanical load;

a first and a second actuator stop (118, 180), said first actuator stop contacting said first shaft stop surface in a first translation position and said second actuator stop contacting said second shaft stop surface at a second translation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft; and

where an application of a drive voltage pulse to said DC motor drives said linear actuator in a first direction until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored rotational energy in said torsion spring, said stored rotational energy driving said linear actuator in a second direction until said first actuator contacts said first shaft stop surface.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,935,071A to Schneider et al. in view of U.S. Patent No. 5,777,404 A to Has.

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Schneider et al. disclose the construction of an ultrasonic biometric imaging and identity verification system as described above.

However, it fails to disclose an elastic strip or a linear spring having a first and a second end, said elastic strip fixed to said frame at said first end and to said shaft at said second end, said elastic strip wrapping said shaft when said shaft is rotated in said first rotation direction, said elastic strip stretching and thus storing energy.

Has teaches the construction of a rotating actuator having an elastic strip (10) and a linear spring (1) for the purpose of setting the flywheel 2 and actuating element 3 into movement through a defined free angle 20.

It would have been obvious to one skilled in the art at the time the invention was made to use the strip and string disclosed by Has on the ultrasonic biometric imaging and identity verification system disclosed by Schneider et al. for the purpose of setting the range of movement of the actuating element and returning it to the starting position when the system is not energized.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 29, 2002

SECRET